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Training Workshop on Science, Technology and Innovation (STI) Policy and Policy Instruments for Sustainable Development Goals (SDGs)



Session 1: Approaches to STI Policy-making in the context of SDGs, with focus on open science and gender equality

Presentation: Introduction of approaches to STI policy for SDGs and gender in STI

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The Sustainable Development Goals



- 17 global goals to eradicate poverty, protect the planet and ensure prosperity for all by 2030

- Accepted by all countries and apply to all

- Everyone has to do their part: governments, the private sector, civil society

- Not legally binding, but governments expected to establish national frameworks for their achievement, monitor and review progress

STI is systemic

STI play a key role in achieving targets across all SDGs

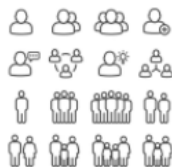
Time dimension : Where does a country want to be in 5, 10 ..years?



Building a Robust STI System requires:



National (Regional)
STI Systems



Variety of institutions
and actors



Linkages and interactions



Legal Framework



Exchanges and flows



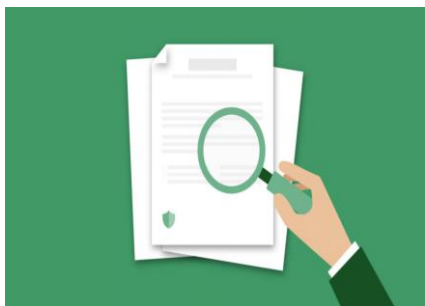
Varieties of Policies

- STI
- Other policies

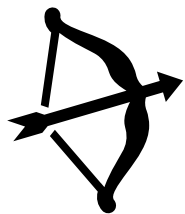
STI Policy Cycle: participatory processes



What a STI Policy might want to address?



STI Policy



Broad goals: Developing research, innovation, science education...

National development plans

Key sectorial priorities

Legal framework

Governance framework

Organizational structure (Institutions, Private, Public, Universities, non-Profit)

Policy instruments

Gender and youth

Capacity building

Funding mechanisms

Monitoring and Evaluation

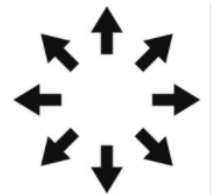
Regional and international co-operation



Other strategic STI policy issues in the context of SDGs :



- ❖ STI from a national to an international perspective, cooperation
- ❖ Fostering multi-stakeholder partnerships for investments in STI for SDGs
- ❖ Transition to Open Science: Open Access to Data and Knowledge, Open Infrastructures, Citizen Science.. more transparent and accountable to society
- ❖ Science Diplomacy
- ❖ Giving directionality in STI policies towards STI related targets of the SDGs
- ❖ Inclusive STI policies, gender, indigenous knowledge
- ❖ Monitor and measure contribution of STI to SDGs implementation with improved STI indicators



GUIDEBOOK

for the preparation of
**Science, Technology and Innovation (STI)
for SDGs Roadmaps**



EUR 30606 EN

 **TECHNOLOGY**
FACILITATION MECHANISM

 **SUSTAINABLE
DEVELOPMENT
GOALS**

 **WORLD BANK GROUP**

 **United
Nations** Department of
Economic and
Social Affairs

 **UNCTAD**

 **UNESCO**
United Nations
Educational, Scientific and
Cultural Organization

 **European
Commission**

 **JST**

 **UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION**

The UN-Inter-agency Task Team (IATT) Guidebook



Framework for developing STI for SDGs roadmaps, a series of six sequential steps



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Gender equality in STI for the achievement of SDGs

4

QUALITY
EDUCATION



4.3 by 2030 ensure equal access for **all women and men** to affordable quality technical, vocational and tertiary education, including university

5

GENDER
EQUALITY



5.5 ensure **women's full and effective participation and equal opportunities** for leadership at all levels of decision-making in political, economic, and public life

8

DECENT WORK AND
ECONOMIC GROWTH



8.5 By 2030 achieve full and productive employment and **decent work for all women and men**, including for young people and persons with disabilities, and equal pay for work of equal value

9

INDUSTRY, INNOVATION
AND INFRASTRUCTURE



9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries....., encouraging innovation and substantially increasing the **number of research and development workers** per 1 million people and public and private research and development spending

17

PARTNERSHIPS
FOR THE GOALS



17.18 ...enhance capacity building support to developing countries, including for LDCs and SIDS, to increase significantly the availability of high-quality, timely and **reliable data disaggregated** by income, gender....



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Women in STI

Although there is growing recognition that STI can contribute significantly to promoting development, STI policies generally lack a gender perspective



Towards inclusive STI policy with gender dimension

Ghana



National Science, Technology and Innovation Policy 2017-2021

The chapter 4 establishes that `the Government of Ghana has placed STI at the center of the country´ s development agenda.

[...] Every effort will be made to achieve gender balance`.



Towards inclusive STI policy with gender dimension



Revised National Science, Technology, and Innovation Policy (NSTIP) 2020–2030


One of the policy guiding principles considers that a gender and equity sensitive approach has the potential to define appropriate interventions[...].

Namibia

All STI interventions shall aim to systematically address their concerns through gender and equity analysis and planning.

- Objective 4: To improve gender equality and mainstreaming in STEM.
- Strategy 1: Establish and improve programmes that support women’s participation in STEM, science careers and as leaders and decision makers.
- Strategy 2: Support the role of women in innovation systems. Design, develop and implement gender-responsive innovation support programmes

Under-representation of women in STI



33%
of researchers in 2018
were women



28%
of engineering
graduates are women

Lack of data on women in STI can obstruct the design, monitoring and evaluation of the STI policies that aim at gender equality

Some international sources for data on women in STI:

- [UNESCO Science Report](#)
- [UNESCO GO-SPIN Platform-women in STEM portal](#)
- [OECD's STIP Compass's gender balance and inclusiveness dashboard.](#)
- WEF Global Gender Gap Report



22%
of professionals in
artificial intelligence
are women



2%
of venture capitals goes to
start-ups founded by
women

Questions for thoughts

How to meet goals of environmental sustainability and at the same time economic growth?

How to reframe STI policy from a unique economic rationale to SDGs perspective?

How to align STI governance structures to the global SDGs framework? (policy advice, steering and funding, co-ordination, and evaluation and monitoring...)

What priority areas for action to embed SDGs within STI policy frameworks?

How to define directionality and concrete mission goals responding to environmental and societal needs within STI policies?

What frameworks for STI are needed for inclusion in decision-making?

Thank you

